

REMARKS/ARGUMENTS

Claims 1 – 23 are presented for reconsideration and further examination in view of the foregoing amendments and following remarks. Claims 21 – 23 are newly added.

In the outstanding Office Action, the Examiner objected to the Abstract due to an informality, objected to the specification because of improper terminology, improper arrangement of the specification, and informalities; objected to claim 3 because claims 4 and 5 are substantial duplicates of claim 3; objected to claims 3, 7 – 9, 12, and 16 – 18 because of informalities; objected to claims 2, 3, 11, 12, and 20 because of improper terminology; found the oath/declaration to be defective; rejected claims 1, 10, and 19 under 35 U.S.C. § 112, 2nd paragraph as being indefinite; rejected claims 1, 10, and 19 under 35 U.S.C. § 103(a) as being unpatentable over Japanese Publication No. 2002-062862 to Kazuyuki (hereinafter referred to as “the Kazuyuki ‘863 Japanese reference”) in view of U.S. Patent Publication No. 2001/0033694 to Goodman et al. (hereinafter referred to as “the Goodman et al. ‘694 publication”); and rejected claims 2 – 9, 11 – 18, and 20 under 35 U.S.C. § 103(a) as being unpatentable over the Kazuyuki ‘862 Japanese reference in view of the Goodman et al. ‘694 publication as set forth in the rejection of claim 1, and further in view of U.S. Patent Publication No. 2004/0017941 to Simske (hereinafter referred to as “the Simske ‘941 publication”).

By this Response and Amendment,

the Abstract has been amended to read: “[a]n apparatus includes: (a) a character image extraction unit for extracting character image data of handwritten characters;”

a new introductory paragraph has been added to the summary the objection to the Summary of the Disclosure has been traversed;

the specification has been amended to eliminate redundancies and to correct cited informalities;

the objections to the claims have been traversed;

claims 1, 10 and 19 have been amended to recite a “font character space which indicates an area being allowed to be occupied by a character;”

claims 21 – 23 have been newly added; and

the obviousness rejections have been traversed.

Support for the amendments to claims 1, 10 and 19 can be found in the originally filed application at page 16, line 18 through page 17, line 2 along with the text shown at the top of associated figure 4; and support for the addition of claims 21 – 23 can be found at page 23, lines 1 – 8; page 28, line 21 – page 29, line 5; and figures 9, 10A and 10B. Therefore, it is respectfully submitted that the above amendments do not introduce new matter to this application within the meaning of 35 U.S.C. §132. Furthermore, the amendments to the claims were cosmetic in nature and not made to overcome a prior art reference.

Objections to the Specification

1. In the Abstract

The Examiner objected to the language of the Abstract of the disclosure because the first two lines of the Abstract, which refer to an apparatus, read: “[a]character image extraction *extracting*....” The Examiner indicated that the Abstract probably should have read “a character image extraction *unit*....”

Response

By this Response and Amendment, the Abstract has been amended to read: “[a]n apparatus includes: (a) a character image extraction unit for extracting character image data of handwritten characters.” Thus, the Abstract now properly refers to an apparatus.

Accordingly, Applicant respectfully requests that the Examiner reconsider and withdraw the objection to the Abstract of the specification.

2. In the Specification

The Examiner objected to the summary of the specification for merely being a recitation of example claims. The Examiner objected to the Detailed Description for also merely being a recitation of sample claims. Lastly, the Examiner objected to the specification for the use of the word “peculiar” on page 11, line 15 as being improper idiomatic English, and suggested replacing this term with the term – particular –.

Response

By this Response and Amendment, the detailed description section has been amended to remove references to the language of the claims and to replace the term “peculiar” with the term – particular – as suggested by the Examiner.

Also, Applicant thanks the Examiner for noting that the language of the Summary of the Disclosure is a mere recitation of the claims. Applicant has amended the Summary of the Disclosure to include an introductory paragraph that should help to quickly provide an overview of embodiments of the inventive method and apparatus.

With respect to the remaining portions of the Summary of the Disclosure, Applicant respectfully traverses the Examiner’s objection to the Summary of the Disclosure as there is no prohibition against the Summary of the Disclosure tracking the language of the claims and thus be written in more general terms.

The Code of Federal Regulations indicates that “[a] brief summary of the invention... should, when set forth, be commensurate with the invention *as claimed* and any object recited

should be that of the invention *as claimed*.” 37 C.F.R. §1.73, *emphasis added*. Also, the Manual of Patent Examining Procedure indicates that “the summary should be directed to the specific invention *being claimed*, in contradistinction to mere generalities.... The brief summary of invention should be consistent with the subject matter of the claims.” MPEP 608.01(d), *emphasis added*.

The Summary of the Disclosure tracks the language of the claims, is “commensurate with the invention as claimed,” as required by the Code of Federal Regulations, and is “directed toward the specific invention being claimed, in contradistinction to mere generalities,” as required by the MPEP. Thus, the Applicant submits that that the Summary of the Disclosure is acceptable.

Accordingly, Applicant respectfully requests that the Examiner reconsider and withdraw the objection to the Summary of the Disclosure.

Objections to the Claims

1. Duplicate Claims

The Examiner put the Applicant on Notice that any subsequent revisions or amendments to claims 4 and 5 might cause the claims to be substantial duplicates of each other.

Response

Applicant notes the Examiner’s comment and submits that, at this point, the Examiner’s comment is moot as dependent claims 4 and 5 are differentiable based on their dependencies on different base claims.

Accordingly, Applicant respectfully requests that the Examiner reconsider and withdraw the objections to claims 4 and 5.

2. Informalities

The Examiner objected to claims 3 and 12, asserting that use of the term “blank” is not correct and opined that the “correct [replacement] terminology would be side, line, portion, or section.” The Examiner also objected to claims 7 – 9 and 16 – 18 for referring to Roman numerals as “having a lower case character.” Lastly, the Examiner objected to claims 2 – 3, 11 – 12 and 20 for using the phrase “circumscribed quadrilateral” rather than the phrase “bounding box,” asserting that bounding box is commonly used among those having ordinary skill in the art in American English.

Response

By this Response and Amendment, Applicant respectfully traverses the Examiner’s objections.

There is no prohibition against the Applicant being his own lexicographer and thus using any terms necessary in the claims to describe the invention. The Examiner must simply give each claim term its broadest possible meaning unless the Applicant has provided a clear definition in the specification to the contrary. *MPEP* §2111.01 (*citing In re Zletz*, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989)).

Applicant chose to use the term “blank” in the claims, which is supported by the originally filed specification, *see e.g. Present Application* page 22, lines 11 – 18. Thus, it is respectfully submitted that amending the claims as the Examiner suggests is superfluous.

With respect to “Roman numerals of a lower case character,” as recited in claims 7 – 9 and 16 – 18, Applicant submits that using the claim to define the case of a Roman numeral, i.e. lower case versus upper case, is perfectly acceptable. Applicant notes that the Examiner’s objection states that the “Roman numerals are referred to as *having* a ‘lower case character’,”

rather than “Roman numerals *of* a lower case character,” as recited in each of claims 7 – 9 and 16 – 18. Thus, in the Examiner’s interpretation, using the word “having” rather than “of” would understandably cause confusion. The word “of” simply requires that the Roman numeral be lower case as opposed to upper case. This notation is supported by the originally filed specification, *see e.g. Present Application* at page 25, lines 15 – 23.

Lastly, the Examiner’s objection to claims 2 – 3, 11 – 12 and 20 is traversed for the reason that Applicant is free to use any phrase to describe the claimed invention. Thus, amending the claims as the Examiner suggests is superfluous.

Accordingly, Applicant respectfully requests that the Examiner reconsider and withdraw the objections to claims.

Objection to the Declaration

The Examiner indicated that the inventor’s declaration is defective for not identifying the inventor’s country of citizenship as China rather than “Chinese” and for being unclear as to whether the inventor’s country is the People’s Republic of China (PRC) or the Republic of China (Taiwan).

Response

By this Response and Amendment, Applicant asserts that the inventor’s country of citizenship is the People’s Republic of China (PRC). A new declaration will be filed representing the inventor’s proper country of citizenship.

Accordingly, Applicant respectfully requests that the Examiner reconsider and withdraw the objection to the declaration.

Rejections Under 35 U.S.C. §112, Second Paragraph

The Examiner rejected claims 1, 10 and 19 as being indefinite, asserting that the term “font character space” is relative and it is unclear whether the Applicant is referring to the sum total of all characters in a font or some other range.

Response

By this Response and Amendment, claims 1, 10 and 19 have been amended to recite a “font character space which indicates an area being allowed to be occupied by *a* character.” Applicant submits that the added language of amended claims 1, 10 and 19 sufficiently defines the font character space as being occupied by a single character. Thus, Applicant asserts that claims 1, 10 and 19 are sufficiently definite.

Accordingly, Applicant respectfully requests that the Examiner reconsider and withdraw the rejections under 35 U.S.C. §112, second paragraph.

Rejections Under 35 U.S.C. §103(a)

1. The Kazuyuki ‘862 Japanese Reference In View of The Goodman et al. ‘694 Publication

The Examiner rejected claims 1, 10 and 19 under 35 U.S.C. §103(a) as being unpatentable over the Kazuyuki ‘862 Japanese reference in view of the Goodman et al. ‘694 publication.

Response

Applicant traverses the Examiner’s rejections because all of the features of the presently claimed invention are neither disclosed, taught, nor suggested by the cited prior art. To establish a *prima facie* case of obviousness, the Examiner must establish: (1) that some suggestion or motivation to modify the references exists; (2) a reasonable expectation of success; and (3) that

the prior art references teach or suggest all of the claim limitations. *Amgen, Inc. v. Chugai Pharm. Co.*, 18 USPQ2d 1016, 1023 (Fed. Cir. 1991); *In re Fine*, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988); *In re Wilson*, 165 USPQ 494, 496 (CCPA 1970).

Independent claim 1 recites “[a]n apparatus for handwritten character font generation comprising: a character image extraction section configured to extract character image data of a handwritten character filled into a character entry box from image data scanned from a character entry sheet in which the handwritten character is filled into the character entry boxes corresponding to respective character codes; *a character positional information storage section configured to store character positional information of font character space which indicates an area being allowed to be occupied by a character defined for each of characters; a character positional information calculation section configured to calculate the amount of movement for moving the extracted character image data to a character position of the font character space defined in the character positional information; a character position alignment section configured to move the character image data to the character position of the font character space defined in the character positional information, based on the calculated amount of movement; and a character font generation section configured to generate font characters of the handwritten character font based on the moved character image data.*” *Present Application*, claim 1, *emphasis added*.

Independent claim 10 recites: “[a] computer readable storage medium recording a program for handwritten character font generation, the program executing in a handwritten character font generation apparatus, the program comprising: extracting character image data of a handwritten character filled into a character entry box from image data scanned from a character entry sheet in which the handwritten character is filled into the character entry box corresponding

to respective character codes; *calculating the amount of movement for moving the extracted character image data* to a character position of font character space which indicates an area being allowed to be occupied by a character defined in character positional information; *moving the character image data* to the character position of the font character space defined in the character positional information based on the calculated amount of movement; and generating font characters of the handwritten character font based on the moved character image data.” *Present Application*, claim 10, *emphasis added*.

And independent claim 19 recites “[a] method for handwritten character font generation in an apparatus for handwritten character font generation, the method comprising: extracting character image data of a handwritten character filled into a character entry box from image data scanned from a character entry sheet in which the handwritten character is filled into the character entry boxes corresponding to respective character codes; *calculating the amount of movement for moving the extracted character image data* to a character position of font character space which indicates an area being allowed to be occupied by a character defined in character positional information; *moving the character image data* to the character position of the font character space defined in the character positional information based on the calculated amount of movement; and generating font characters of the handwritten character font based on the moved character image data.” *Present Application*, claim 19, *emphasis added*.

a. Character Positional Information Storage Section

The Kazuyuki ‘862 Japanese reference discloses a method of inputting images of a large quantity of handwritten characters. The method includes using an entry sheet having solid line frames in which characters are handwritten. A computer captures the contents of each of the

solid line frames such that an exact reproduction of the character can be produced.

In contrast to the presently claimed invention, the Kazuyuki '862 Japanese reference does not disclose, teach or suggest "a character positional information storage section," as recited in independent claim 1. Positional information can, for example, be embodied as a database that stores information indicating where the character should be and that stores information about the ratio of a character's left blank to the right blank, as well as the ratio of the top blank to the bottom blank. *See Present Application* at page 22, line 19 through page 23, line 8.

The Examiner primarily refers to the Kazuyuki '862 Japanese reference in support of his assertion that a character image extraction section is shown in the prior art. Thus, the Examiner relies on the Goodman et al. '694 publication to show that "a character information storage section" is present in the prior art. However, like the Kazuyuki '862 publication, the Goodman '694 publication does not disclose, teach, or suggest "a character positional information storage section," as recited in independent claim 1. The Goodman '694 publication discloses a method of recognizing handwriting read through a scanner. The cited method automates the process of reading handwriting and correlating the handwriting with an intended meaning of the handwriting. One of the steps of the process is normalization of the scanned writing in accordance with other writings that are already in a database.

In support of the Examiner's assertion that the "a character positional information storage section" is obvious, the Examiner asserts that "Goodman [0085] teaches normalization of detected text, which clearly includes 'size normalization' and word segmentation.... This means that positional information must *prima facie* be known." *Office Action* at 7, *emphasis in original*.

Merriam-Webster defines "normalize" as to "make conform to or reduce to a norm or

standard.” *Merriam-Webster’s Third New International Dictionary* 1540 (1993). The Examiner is thus transforming the word “normalize” from making an object conform to a known size to knowing the *position* of the object. However, this analogy is stretching the definition of the word normalize; one thing has nothing to do with the other. There is no indication that a publication that discloses *normalization* of text is equivalent to knowing *positional* information. The Goodman et al. ‘694 publication simply teaches that *size* information must be known. There is no indication in the Goodman, et al. ‘694 publication disclosing positional information as recited in claim1.

The Examiner’s interpretation of the word “normalize” is erroneous for the additional reason that paragraph [0087] of the Goodman ‘694 publication contradicts his assertion. Paragraph [0087] of the Goodman ‘694 publication is in accord with Merriam-Webster’s definition of “normalize” and states that “825 normalizes the word box/aspect ratio, to make the size of this word box and aspect ratio either *the same as, or scaled relative to* other items which are already in the database.” *The Goodman ‘694 publication* at page 5, paragraph 0087. This is in contrast with the Examiner’s strained meaning of the word “normalize.” Thus, for at least the reason that neither the Kazuyuki ‘862 Japanese reference nor the Goodman et al. ‘694 publication discloses, teaches, or suggests “a *character positional information storage section* configured to store character positional information of font character space occupied by a character defined for each of characters,” as recited in independent claim 1, independent claim 1 is not rendered obvious by either reference, alone or in combination with each other.

The presently claimed invention is patentable over the cited prior art for the additional reason that it does not disclose, teach, or suggest “a character positional information *calculation section configured to calculate the amount of movement* for moving the extracted character

image data,” as recited in independent claim 1, or a step of “*calculating the amount of movement* for moving the extracted character image data,” as recited in independent claims 10 and 19. This is due to the fact that neither cited reference discloses, teaches, or suggests, “a character positional information storage section configured to store character positional information.”

Applicant submits that, to be able to “calculate[e] the amount of movement for moving the extracted character image data,” the character’s position must be known. However, as neither reference discloses knowing the position of a character, there can be no calculation of movement.

Thus, for at least the additional reason that neither the Kazuyuki ‘862 Japanese reference nor the Goodman et al. ‘694 publication discloses, teaches, or suggests “a character positional information *calculation section configured to calculate the amount of movement* for moving the extracted character image data,” as recited in independent claim 1, or a step of “*calculating the amount of movement* for moving the extracted character image data to a character position of font character space occupied by a character defined in character positional information,” as recited in independent claims 10 and 19, independent claims 1, 10 and 19 are not rendered obvious by either reference, alone or in combination with each other.

b. Character Position Alignment Section

Lastly, neither reference discloses, teaches, or suggests “a character position *alignment section configured to move the character image data* to the character position of the font character space defined in the character positional information, based on the calculated amount of movement,” as recited in independent claim 1, or a step of “*moving the character image data* to the character position of the font character space defined in the character positional information based on the calculated amount of movement,” as recited in independent claims 10 and 19.

Notwithstanding Applicant's assertion that knowing the positional information of a character is not disclosed by either cited reference, neither cited reference discloses *moving* the character image data as recited in each of the independent claims of the present application. Thus, for this additional reason, the presently claimed invention is patentable over the cited prior art.

The advantage to moving a character within a character box as recited in the independent claims is that font characters that are created based on the handwritten font characters are more attractive to the eye.

Accordingly, Applicant respectfully requests that the Examiner reconsider and withdraw the outstanding rejections.

2. The Kazuyuki '862 Japanese Reference In View of The Goodman et al. '694 Publication In Further View of The Simske '941 Publication

The Examiner rejected claims 2 – 9, 11 – 18 and 20 as being unpatentable over the Kazuyuki '862 Japanese reference in view of the Goodman et al. '694 publication in further view of the Simske '941 publication.

Response

By this Response and Amendment, Applicant respectfully traverses the Examiner's rejections as all of the features of the independent claims from which claims 2, 11 and 20 are not disclosed, taught, or suggested in the cited prior art.

The arguments above with respect to the Kazuyuki '862 Japanese reference and the Goodman et al. '694 publication are hereby incorporated by reference.

The Examiner cites the Simske '941 publication to show "calculate[ing] a circumscribed quadrilateral of a character portion of the character image data," as recited in dependent claims 2, 11, and 20. The Simske '941 publication discloses a system for performing processing on digital

data defining a graphical image in order to facilitate editing of the graphical image. The system disclosed in the Simske '941 publication performs zoning analysis by dividing an image defined by image data into regions of various types.

The Simske '941 publication does not account for the deficiencies of the Kazuyuki '862 Japanese reference or the Goodman et al. '694 publication. Nowhere does the Simske '941 publication disclose, teach, or suggest "a character positional information calculation section configured to calculate the amount of movement for moving the extracted character image data to a character position of the font character space occupied defined in the character positional information," as recited in independent claim 1. Also, the Simski '941 does not disclose, teach, or suggest "a character positional information *calculation section configured to calculate the amount of movement* for moving the extracted character image data," as recited in independent claim 1, or a step of "*calculating the amount of movement* for moving the extracted character image data to a character position of font character space occupied by a character defined in character positional information," as recited in independent claims 10 and 19. Lastly, the Simski '941 publication does not disclose, teach, or suggest "a character position *alignment section configured to move the character image data* to the character position of the font character space defined in the character positional information, based on the calculated amount of movement," as recited in independent claim 1, or a step of "*moving the character image data* to the character position of the font character space defined in the character positional information based on the calculated amount of movement," as recited in independent claims 10 and 19.

With particular respect to claim 2, according to paragraph [0072] of the Simske '941 publication, although the reference discloses "bounding box" and method of changing its size, the reference fails to disclose, teach or suggest the feature of moving the position of information

inside the bounding box to the desired position by using the bounding box, i.e., there's no disclosure, teaching, or suggestion to "mov[e] the character portion of the character image data based on the calculated amount of movement" as recited in claim 2. Hence, even if the references can be combined with one another, the combined references do not disclose, teach, or suggest the feature of moving the position of the information inside the bounding box to the desired position. And therefore, it is clearly impossible to calculate the amount of movement for moving the information inside the bounding box by the combined references.

Thus, as dependent claims contain all of the features of the independent claims from which they depend and for the reasons stated with respect to claim 2, Applicant submits that dependent claims 2 – 9, 11 – 18 and 20 are patentable over the cited prior art for at least the same reasons as independent claims 1, 10 and 19.

Accordingly, Applicant respectfully requests that the Examiner reconsider and withdraw the rejections to the dependent claims.

MISCELLANEOUS

Applicant asserts that newly added claims 21 – 23 are patentable over the cited prior art as none of the references discloses, teaches, or suggests "calculate[ing] the amount of movement for moving the extracted character image data of the specific character to a character position in the font character space," as recited in each of the newly added claims.

CONCLUSION

In light of the foregoing, Applicant submits that the application is now in condition for allowance. If the Examiner believes the application is not in condition for allowance, Applicant

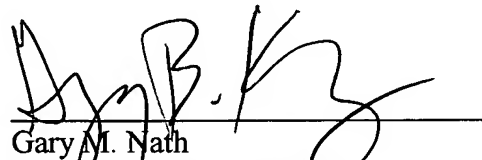
respectfully requests that the Examiner contact the undersigned attorney if it is believed that such contact will expedite the prosecution of the application.

In the event this paper is not timely filed, Applicant petitions for an appropriate extension of time. Please charge any fee deficiency or credit any overpayment to Deposit Account No. 14-0112.

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